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EXAMINER	
RAO, ANAND SHASHIKANT	
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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/977,099	Applicant(s) SHEN ET AL	
	Examiner Andy S. Rao	Art Unit 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### *Specification*

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Yuan et al., (hereinafter referred to as "Yuan").

A method for video navigation (Yuan: column 26, lines 10-25) comprising: forming a window video sequence having dimension corresponding first location within said dimension in response to a first request from a first client is remotely located (Yuan: column 6, lines 1-25); generating a first window video sequence corresponding to said window at said first location, said first window video sequence having a first compression prediction following a compression format (Yuan: column 7, lines 40-65); navigating said window from said first location to second location in said dimension in response to a second request from said first client (Yuan: column 23, lines 15-45); and generating a second window video sequence corresponding to said window

Art Unit: 2613

at said second location, said second window video sequence having a second compression prediction following said compression format (Yuan: column 7, lines 45-50), as in claim 1.

Regarding claim 2, Yuan discloses extracting from a compressed version of said video sequence prediction information for said window video sequence that independently complies with said compression format for said window, and substituting intra coded information that is decoded from an uncompressed version of said video sequence in said compression format to complete said window video sequence (Yuan: column 13, lines 52-67; column 14, lines 1-40), as in the claim.

Regarding claim 3, Yuan discloses extracting from said first window video sequence prediction information based on blocks contained within said window at said second location for said second compression prediction (Yuan: column 13, lines 20-25), and substituting intra coded information that is coded from an uncompressed version of said video sequence in said compression format to complete said second window video sequence (Yuan: column 13, lines 52-67; column 14, lines 1-40), as in the claim.

Regarding claims 4-5, Yuan discloses referencing a reference block in said second window video sequence, said reference block associated with an adjusted motion vector by adding a navigation step vector to an associated motion vector (Yuan: column 14, lines 1-10), as in the claims.

Regarding claim 6, Yuan discloses that the compression format is a Motion Picture Expert Group (MPEG) compression format (Yuan: column 7, lines 45-50).

Art Unit: 2613

Regarding claim 7, Yuan sizing said first window within said dimension in response to said first request, and locating said first window at said first location in response to said first request (Yuan: column 7, lines 10-20), as in the claim.

Regarding claim 8, Yuan discloses transmitting said second window video sequence to said first client for viewing (Yuan: column 23, lines 23-45), as in the claim.

Regarding claims 9-10, Yuan discloses navigation as described in contemporaneously forming a second window corresponding to a third location within said dimension response to a third request from a second client that remotely located (Yuan: column 23, lines 30-35), as in the claims.

A method for video navigation (Yuan: column 25, lines 10-25) comprising: creating a plurality of windows within a sequence having dimension in response to window requests from corresponding clients in a plurality of clients (Yuan: column 23, lines 30-35) that are remotely located (Yuan: column 6, lines 1-25), each of said plurality of windows associated with one of said plurality of clients (Yuan: column 5-21); for each of said plurality of windows, generating a window video sequence from said video sequence following a compression format corresponding to client defined size and location information within said dimension (Yuan: column 7, lines 40-65); independently navigating each of said plurality windows throughout said dimension in response to navigation requests from said corresponding clients (Yuan: column 23, lines 15-45); and for each of said plurality of windows that navigated to a new location, generating a new window video sequence following said compression format (Yuan: column 7, lines 45-50), as in claim 11.

Regarding claim 12, Yuan discloses for each of said plurality of windows, contemporaneously transmitting said window video sequence, and for each of said plurality of windows that is navigated to a new location, contemporaneously transmitting said new window video sequence (Yuan: column 6, lines 50-67), as in the claim.

Regarding claim 13, Yuan discloses extracting from a compressed version of said video sequence prediction information that independently complies with said compression format for each of said plurality of windows, and substituting intra coded information that is coded from an uncompressed version said video sequence (Yuan: column 13, lines 52-67; column 14, lines 1-40), as in the claim.

Regarding claim 14, Yuan discloses incorporating independently coded information from said compressed version in said window video sequence (Yuan: column 10, lines 1-35), as in the claim.

Regarding claim 15-16, Yuan discloses cropping said window video sequence for prediction information that independently complies with said compression format windows that is navigated, and substituting intra coded information that coded from an uncompressed version of said video sequence in said compression format to complete said window video sequence for each of said plurality of windows navigated (Yuan: column 13, lines 52-67; column 14, lines 1-40), as in the claims.

Regarding claim 17, Yuan discloses referencing a reference block in said window video sequence, said reference block associated with an adjusted motion vector by adding a navigation step vector to an associated motion vector (Yuan: column 14, lines 1-10).

Art Unit: 2613

Regarding claims 18-19, Yuan discloses contemporaneously, for each of said plurality of windows, transmitting said window video sequence to one of a plurality of remote clients (Yuan: column 23, lines 30-35), as in the claims.

Yuan discloses a communication network for presenting video (Yuan: figure 1), comprising: a video source for providing a live video sequence having dimension; coupled to said video source for said video sequence, forming a captured video sequence (Yuan: column 5, lines 25-30); compression module coupled to said video source compressing and encoding said video sequence compression format, forming a compressed video sequence (Yuan: column 45-50); and a server coupled to said capture module and said a capture module of client devices, a plurality of portions of said portions corresponding to one of a plurality of cropped windows said video sequence (Yuan: column 7, lines 1-20), and contemporaneously transmitting each of said plurality of portions to one client devices (Yuan: column 23, lines 30-35), as in claim 20.

Regarding claim 21, Yuan discloses that the server further comprises: a pixel picture buffer adaptively coupled to said capture module for receiving said captured video sequence (Yuan: column 7, lines 65-67; column 8, lines 1-5); a coded picture buffer adaptively coupled to compression module for receiving sequence (Yuan: column 5, lines 50-60), and said compressed video a video cropping engine adaptively coupled (Yuan: column 23, lines 23-45) to said pixel picture buffer and said coded picture buffer generating each of said plurality of portions of said video sequence said compression format by combining data from said compressed video sequence and said captured video sequence (Yuan: column 6, lines 45-67), as in the claim.

Regarding claim 22, Yuan discloses receiving said requests for a plurality of portions of said video sequence, said requests including navigation control requests, each of which move

Art Unit: 2613

one of said plurality cropped windows from one location in said dimension to another location in said dimension (Yuan: column 7, lines 1-15).

Regarding claim 23, Yuan discloses a communication network for presenting video, wherein said video cropping engine utilizes data from said compressed video sequence whenever possible in generating each of said plurality of portions, and substitutes data from said captured video sequence when necessary (Yuan: column 10, lines 1-35).

Regarding claim 24, Yuan discloses wherein said video source is a stationary camera (Yuan: column 5, lines 25-30).

Yuan discloses a computer system (Yuan: column 5, lines 25-30) comprising: a processor (Yuan: column 5, lines 42-44); a computer readable memory coupled to said processor and containing program instructions that, when executed, implement a method for video navigation (Yuan: column 5, lines 39-41) comprising: forming a window video sequence having dimension corresponding first location within said dimension in response to a first request from a first client is remotely located (Yuan: column 6, lines 1-25); generating a first window video sequence corresponding to said window at said first location, said first window video sequence having a first compression prediction following a compression format (Yuan: column 7, lines 40-65); navigating said window from said first location to second location in said dimension in response to a second request from said first client (Yuan: column 23, lines 15-45); and generating a second window video sequence corresponding to said window at said second location, said second window video sequence having a second compression prediction following said compression format (Yuan: column 7, lines 45-50), as in claim 25.



Art Unit: 2613

Regarding claim 26, Yuan discloses extracting from a compressed version of said video sequence prediction information for said window video sequence that independently complies with said compression format for said window, and substituting intra coded information that is decoded from an uncompressed version of said video sequence in said compression format to complete said window video sequence (Yuan: column 13, lines 52-67; column 14, lines 1-40), as in the claim.

Regarding claim 27, Yuan discloses extracting from said first window video sequence prediction information based on blocks contained within said window at said second location for said second compression prediction (Yuan: column 13, lines 20-25), and substituting intra coded information that is coded from an uncompressed version of said video sequence in said compression format to complete said second window video sequence (Yuan: column 13, lines 52-67; column 14, lines 1-40), as in the claim.

Regarding claims 28-29, Yuan discloses referencing a reference block in said second window video sequence, said reference block associated with an adjusted motion vector by adding a navigation step vector to an associated motion vector (Yuan: column 14, lines 1-10), as in the claim.

Regarding claim 30, Yuan discloses that the compression format is a Motion Picture Expert Group (MPEG) compression format (Yuan: column 7, lines 45-50).

Regarding claim 31, Yuan sizing said first window within said dimension in response to said first request, and locating said first window at said first location in response to said first request (Yuan: column 7, lines 10-20), as in the claim.

Art Unit: 2613

Regarding claim 32, Yuan discloses transmitting said second window video sequence to said first client for viewing (Yuan: column 23, lines 23-45), as in the claim.

Regarding claims 33-34, Yuan discloses navigation as described in contemporaneously forming a second window corresponding to a third location within said dimension response to a third request from a second client that remotely located (Yuan: column 23, lines 30-35), as in the claims.

### *Conclusion*

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kim discloses systems and methods for refreshing macroblocks. Wu discloses a system and method for robust video coding using progressive FGS coding. Hochmuth discloses a method, node and network for compressing and transmitting composite images to a remote client. Chen discloses robust, reliable compression and packetization. Klein Gunnewick discloses efficient scaleable compression schemes. Caglar discloses video coding. Song discloses a system and method for extracting spatially reduced image sequences.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (703)-305-4813. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris S. Kelley can be reached on (703)-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2613

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andy S. Rao  
Primary Examiner  
Art Unit 2613

asr  
December 1, 2004

ANDY RAO  
PRIMARY EXAMINER

